REMARKS

Independent Claims 1 has been rejected under 35 U.S.C. §§ 102 or 103 based on French Pat. No. 2,767,810 to Boscher et al. (hereinafter "Boscher"), either alone or in combination with brochures published by the W. Haldenwanger company, as well as the NIST materials property data summary for sintered silicon carbide.

Claim 1 as amended recites a method for producing a cylindrical glass body in a vertical drawing process. The method comprises a method step in which a glass blank is supplied to a heating zone, and softened therein zonewise, and a glass strand is drawn off using a draw-off device at a controlled drawing speed from the softened area. The draw-off device comprises a first draw-off unit having rolling bodies rolling on the glass strand and being distributed around the circumference of it. The rolling bodies of the draw-off device includes a reference rolling body and at least one auxiliary rolling body. The reference rolling body and the auxiliary rolling body or bodies each have a respective varying torque acting on them which is dependent on a variable weight of the drawn-off glass strand. The drawing speed is controlled by setting a speed of said reference rolling body. The draw-off device further comprises at least one additional draw-off unit that includes a plurality of additional rolling bodies each rolling on the glass strand. A value correlated to the torque acting on said reference rolling body is determined and the determined value is used as a setpoint torque based on which the torque acting on the at least one auxiliary rolling body and the torques acting on the additional rolling bodies of the at least one additional draw-off unit are adjusted so as to equalize the torque acting on the reference rolling body and the torques acting on the at least one auxiliary rolling body and the additional rolling bodies. The value is determined repeatedly or continuously, and the setpoint

torque is a variable setpoint torque used to repeatedly or continuously adjust the torques of the at least one auxiliary rolling body and the additional rolling bodies as the glass strand depending from them changes in weight as the cylindrical glass body is drawn.

This method produces glass strands with reduced surface damage by distributing more evenly the force guiding the glass strand irrespective of changes in the weight of the strand during the drawing process. See specification, page 6, lines 13 to 20. The continuous adjustment of each of the rolling bodies works to apply the same amount of torque to the strand at all the rolling bodies as the glass strand changes in weight during the drawing process. See, e.g., specification, page 7, lines 2 to 7.

Boscher does not show or suggest either the recited step of determining the torque on the reference rolling body or the step of using that varying torque as a setpoint based on which the torque acting on the at least one auxiliary rolling body and the torques acting on the additional rolling bodies are adjusted so as to equalize the torque acting on the reference rolling body and the torques on the auxiliary rolling body and the additional rolling bodies. In contrast, Boscher teaches that wheel 4 and its cooperating roller 12 apply *unequal torques* on the glass tube being pulled. Boscher teaches that each pair of opposing rollers applies equal traction forces on the tube 32. See Boscher, Page 12, lines 2-6. Consequently, the torque applied by the larger wheel 4 and the torque applied by the smaller roller 12 must be different to produce the same traction force due to the widely differing radii of the two wheels.

In addition, Boscher teaches that the upper rollers 12 and 4 and the lower rollers 14 and 16 apply *unequal torques* on the glass tube. Boscher teaches that the traction force (T_1) applied by upper wheel 12 is ***half*** of the traction force (T_2) applied by lower roller 14. See Boscher,

page 12, lines 10 to 11 (stating that $T_R = T_1$, and $T_2 = T_3 = 2T_R$, ergo $T_2 = 2*T_1$.). Figures 1 to 3 depict rollers 12 and 14 as being equal in size. Therefore, the torque applied by roller 12 must be half of the torque applied by roller 14.

The Boscher system therefore clearly teaches the application of unevenly distributed drawing torques, resulting in an undesirable distribution of the forces for guiding the glass being drawn. The method of claim 1, in equalizing the torques of the rolling bodies avoids this, and the result is an improved drawing process. See specification, page 6, lines 13 to 20.

The Examiner argues that Boscher inherently suggests adjusting the applied torque in response to a varying weight of the drawn off glass strand because Boscher teaches maintaining a non-slip contact between the wheel 4, and the tube 32 while rotating driving wheel 4 at a constant speed, even when the wheel 4 is subject to a variable strength torque. See Page 13 of Office Action. However, Boscher clearly teaches that rollers 12, 14 and 16 are driven by respective motors 26, 28 and 30 to apply a *constant torque* on the tube, and nowhere suggests varying the torques of the rollers throughout the drawing process as expressed in claim 1. See Boscher, Page 9, lines 21 to 24. Therefore, these passages of Boscher can only be read to state that the rollers apply a constant torque on the tube that is high enough to prevent slipping of the strand at the heaviest possible weight of the glass strand. Boscher therefore teaches several constant but different drawing torques on the wheels 12, 14 and 16 that do not vary with the weight of the tube as it is drawn, not the time varying torques that claim 1 recites, which are substantially equalized for all rolling bodies throughout the drawing process.

Therefore, Boscher does not teach or suggest the present invention, and reconsideration of the rejection is respectfully requested.

Claims 2, 4, 6 to 11 and 21 to 28 depend directly or indirectly from claim 1 and therefore distinguish therewith over the prior art.

Independent claim 29 as amended recites a method for producing a cylindrical glass body in a vertical drawing process in which the reference rolling body torque value is used as a variable setpoint torque for the torque based on which the torque acting on said at least one auxiliary rolling body and the torques acting on the additional rolling bodies of the at least one additional draw-off unit are adjusted so as to equalize the torques acting on the reference rolling body, the auxiliary rolling body and the additional rolling bodies.

Claim 29 distinguishes over the cited prior art for reasons similar to those expressed above in regard to claim 1.

All claims having been shown to distinguish over the prior art in structure, function and result, formal allowance is respectfully requested.

Should any questions arise, the Patent Office is invited to telephone attorney for applicants at 212-490-3285.

Respectfully submitted,

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